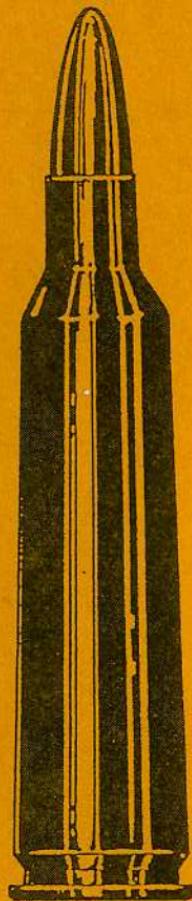


One Book / One Caliber

2000
EDITION

*The
Complete
Reloading
Manual
for the
.22-250
Remington*



Containing Unabridged Information
from U.S. Bullet
and Powder Makers

Accurate * Alliant * Hodgdon * Hornady
IMR * Lyman * Nosler * RCBS * Scot
Sierra * Speer * Winchester and Others

1,543 Proven & Tested Loads
52 Various Bullet Designs
48 Different Powders

RELOADING SAFETY RULES

Reloading is an enjoyable and rewarding hobby that is easily conducted with safety. But, like many other human endeavors, carelessness or negligence can make reloading hazardous.

The essence of reloading safety is proper handling and storage of primers and powder. By observing the following rules, the chance of hazardous occurrence becomes extremely remote.

Store powder and primers beyond the reach of children and away from heat and open flames. Do not smoke when reloading.

Keep no more powder than needed in an open container. Immediately return unused powder to its original factory container.

Don't use any powder unless its identity is positively known. Scrap all mixed powders and those of uncertain or unknown identity.

Do not store primers in bulk. To do so is to create a bomb! Bulk primers will mass detonate. Do not use primers when their identity is lost. Safely dispose of unknown types of primers.

Courtesy of Speer Reloading Manual No. 11

All loading data contained in this book is the result of testing by the various bullet and powder manufacturers. Under carefully controlled conditions and with the components and test equipment specified, this data proved safe in their tests. Since none of the companies, nor the publisher, listed herein has control over the components and equipment which may be used with this published information, no responsibility is implied or assumed for results obtained through its use.

Courtesy of Hornady Manufacturing Company, Inc.

Sierra Bullets cannot and does not accept any liability, either expressed or implied, for results of damage or injury arising from or alleged to have arisen from the use of the data in this manual.

Courtesy of Sierra Bullets

Follow loading recommendations exactly. Don't substitute components for those listed. Start loading with the minimum powder charges. Understand what you are doing and why it must be done in a specific way. Stay alert when reloading. Don't reload when distracted, disturbed or tired.

Courtesy of Nosler Bullets, Inc.

The Complete Reloading Manual for the .22-250 Remington

The publisher is deeply indebted to the following companies for their permission to reprint their proprietary reloading information found in this manual.

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Hodgdon Powder Co., Inc.
Hornady Manufacturing Company
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Lyman Products Corporation
Nosler Bullets, Inc.
RCBS Bullets
Scot Powders
Sierra Bullets, L.P.
Speer Bullets
Winchester

TABLE OF CONTENTS

.22-250 REMINGTON

HORNADY BULLETS

Hornady Introduction	1
Hornady 45 grain	2
Hornady 50 grain	3
Hornady 52/53 grain	4
Hornady 55 grain	5
Hornady 55 FMJ/60 grain.....	6

NOSLER BULLETS

Nosler Introduction	7
Nosler 40 grain	9
Nosler 50 grain	10
Nosler 55 grain	11
Ackley Improved Intro	12
Ackley 40 grain	14
Ackley 50/55 grain	15

SIERRA BULLETS

Sierra Introduction	16
Sierra 40 grain	17
Sierra 45 grain	18
Sierra 50 grain	19
Sierra 52/53 grain	20
Sierra 55 grain	21
Sierra 60 grain	22
Sierra 62/69 grain	23

SPEER BULLETS

Speer Introduction	24
Speer 40 grain	25
Speer 45/50 grain	26
Speer 52 grain	27
Speer 55 grain	28
Speer 70 grain	29

LYMAN BULLETS

Lyman Introduction	30
Lyman 37 grain	33
Lyman 41/45 grain	34
Lyman 54/55 grain	35

RCBS BULLETS

RCBS 57 grain	36
---------------------	----

TABLE OF CONTENTS

.22-250 REMINGTON

HODGDON POWDERS

Hodgdon Introduction	37
40-55 grain Loads.....	38
62-70 grain Loads.....	39
Lead Loads	40

ACCURATE ARMS POWDERS

Accurate Introduction	41
2015BR/2230/2460/2520	
2700/3100/4350	42

ALLIANT POWDERS

Reloder 12/15/19.....	44
-----------------------	----

IMR POWDERS

50/55 grain Loads.....	45
------------------------	----

SCOT POWDERS

3032/4065/4351	46
----------------------	----

WINCHESTER POWDERS

748/760	47
---------------	----

VIHTAVUORI POWDERS

Vihtavuori Introduction	48
45-69 grain Loads.....	49

BARNES BULLETS

Barnes Introduction.....	50
45/50 grain Loads.....	51
53 grain Loads.....	52

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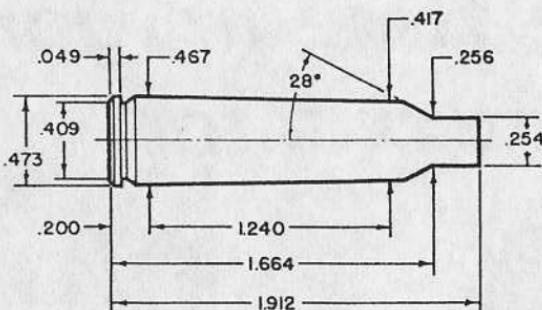
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DISCLAIMER

SHOOTER'S LOG

SHOOTER'S LOG



22-250 REMINGTON

RIFLE: REMINGTON 700
BARREL: 24", 1 in 14" TWIST
CASE: HORNADY/FRONTIER
PRIMER: FEDERAL 210

BULLET DIAMETER: .224"
MAXIMUM C.O.L.: 2.350"
MAX. CASE LENGTH: 1.912"
CASE TRIM LENGTH: 1.892"

The 22-250 Remington is based on the necked down 250-3000 case with the shoulder angle changed to 28 degrees. In 1967, thirty years after the original wildcat versions, Remington began production of this cartridge in their Model 700 series rifles.

The 22-250 is only slightly less powerful than the 220 Swift and is more versatile; the 22-250 more readily handles reduced loads. This potent 22 caliber cartridge has been used for a great variety of game from varmints to deer. Of course, the 22-250 is best suited for varminting.

The powders that gave the most uniform results with best accuracy throughout the range of bullets were IMR 3031, IMR 4895, and IMR 4064. Winchester 760 gave the highest velocities with fair accuracy and may be a top choice in a different rifle. Shooters using the 45 grain Hornet bullet should note that the maximum velocity listed is 3600 fps. The reason for this limit lies in the construction of the bullet. It is designed to expand at 22 Hornet velocities and therefore has too thin a jacket to be fired at velocities higher than 3600 fps. At velocities exceeding 3600 fps, bullets sometimes come apart before they reach the target. Also, note the thin jacket of SX bullets limits them to velocities of 3500 fps. Exceeding this limit can result in bullets disintegrating in flight. As in any of the larger 22's, the heavier bullets are normally the best choice for optimum performance.

.22-250 REMINGTON - HORNADY BULLETS

45 GRAIN BULLETS:

SECTIONAL DENSITY: .128
DIAMETER: .224"

#2230 Hornet
Ballistic Coefficient — .202
C.O.L. — 2.350"



VELOCITY

POWDER	3200 fps	3300 fps	3400 fps	3500 fps	3600 fps
H4895	26.7 gr.	27.9 gr.	29.2 gr.	30.4 gr.	31.6 gr.
AA 2230	27.1 gr.	28.2 gr.	29.3 gr.	30.4 gr.	31.6 gr.
AA 2460	27.1 gr.	28.3 gr.	29.5 gr.	30.8 gr.	32.0 gr.
IMR 3031	30.2 gr.	31.0 gr.	31.8 gr.	32.6 gr.	33.4 gr.
IMR 4895	30.8 gr.	31.6 gr.	32.4 gr.	33.2 gr.	34.0 gr.
H335	30.5 gr.	31.5 gr.	32.6 gr.	33.6 gr.	34.6 gr.
IMR 4064	31.8 gr.	32.5 gr.	33.3 gr.	34.1 gr.	34.9 gr.
IMR 4320	32.3 gr.	33.1 gr.	33.9 gr.	34.6 gr.	35.4 gr.
WIN 748	33.3 gr.	34.2 gr.	35.0 gr.	35.9 gr.	36.7 gr.
WIN 760	34.0 gr.	35.0 gr.	36.0 gr.	37.1 gr.	38.1 gr.
H414	37.0 gr.	37.8 gr.	38.7 gr.	39.5 gr.	40.4 gr.

Indicates maximum load - use with caution

.22-250 REMINGTON - HORNADY BULLETS

50 GRAIN BULLETS:

SECTIONAL DENSITY:

-142-

DIAMETER:-

231"

#2245 SP

Ballistic Coefficient = .214

C.O.L. = 2.350"



VELOCITY

POWDER	3400 fps	3500 fps	3600 fps	3700 fps	3800 fps	3900 fps
H4895	30.9 gr.	32.0 gr.	33.1 gr.	34.2 gr.	35.3 gr.	
AA 2230	30.3 gr.	31.4 gr.	32.5 gr.	33.6 gr.	34.7 gr.	35.9 gr.
AA 2460	30.9 gr.	32.1 gr.	33.3 gr.	34.6 gr.		
IMR 3031	31.8 gr.	32.7 gr.	33.6 gr.	34.5 gr.	35.4 gr.	
IMR 4895	32.3 gr.	33.2 gr.	34.2 gr.	35.1 gr.		
IMR 4064	33.1 gr.	34.0 gr.	34.9 gr.	35.8 gr.	36.7 gr.	
H335	32.9 gr.	33.9 gr.	34.9 gr.	35.9 gr.	36.9 gr.	37.9 gr.
IMR 4320	33.9 gr.	34.8 gr.	35.7 gr.			
WIN 748	34.7 gr.	35.7 gr.	36.7 gr.	37.7 gr.	38.7 gr.	
WIN 760	36.0 gr.	37.2 gr.	38.4 gr.	39.5 gr.	40.7 gr.	41.9 gr.
H414	38.8 gr.	39.6 gr.	40.4 gr.	41.3 gr.	42.1 gr.	43.0 gr.

Indicates maximum load - use with caution

.22-250 REMINGTON - HORNADY BULLETS

52-53 GRAIN BULLETS:

SECTIONAL DENSITY: .148 - .151
DIAMETER: .224"

#2249 BTHP Match

Ballistic Coefficient — .229

C.O.L. — 2.350"



#2250 HP Match

Ballistic Coefficient — .218

C.O.L. — 2.350"



VELOCITY

POWDER	3300 fps	3400 fps	3500 fps	3600 fps	3700 fps	3800 fps
H4895	31.1 gr.	32.0 gr.	32.9 gr.	33.9 gr.		
AA 2230	30.4 gr.	31.6 gr.	32.8 gr.	34.0 gr.	35.2 gr.	
AA 2460	30.3 gr.	31.6 gr.	33.0 gr.	34.3 gr.		
IMR 3031	31.0 gr.	32.1 gr.	33.1 gr.	34.2 gr.		
IMR 4895	31.4 gr.	32.5 gr.	33.6 gr.	34.6 gr.		
H335	32.0 gr.	33.2 gr.	34.3 gr.	35.4 gr.		
IMR 4064	32.7 gr.	33.6 gr.	34.5 gr.	35.4 gr.	36.3 gr.	
IMR 4320	33.4 gr.	34.4 gr.	35.3 gr.			
WIN 748	33.4 gr.	34.7 gr.	35.9 gr.	37.1 gr.		
WIN 760		36.5 gr.	37.7 gr.	39.0 gr.	40.2 gr.	41.4 gr.
H414	37.6 gr.	38.6 gr.	39.6 gr.	40.6 gr.	41.5 gr.	

Indicates maximum load - use with caution

.22-250 REMINGTON - HORNADY BULLETS

55 GRAIN BULLETS:

SECTIONAL DENSITY: .157

DIAMETER: .224"

#2265 SP

Ballistic Coefficient — .235
C.O.L. — 2.350"



#2266 SP w/c

Ballistic Coefficient — .235
C.O.L. — 2.350"



#2267 FMJ-BT w/c

Ballistic Coefficient — .243
C.O.L. — 2.350"



VELOCITY

POWDER	3300 fps	3400 fps	3500 fps	3600 fps	3700 fps	3800 fps
H4895	31.1 gr.	32.0 gr.	32.9 gr.	33.9 gr.		
AA 2230	30.4 gr.	31.6 gr.	32.8 gr.	34.0 gr.	35.2 gr.	
AA 2460	30.3 gr.	31.6 gr.	33.0 gr.	34.3 gr.		
IMR 3031	31.0 gr.	32.1 gr.	33.1 gr.	34.2 gr.		
IMR 4895	31.4 gr.	32.5 gr.	33.6 gr.	34.6 gr.		
H335	32.0 gr.	33.2 gr.	34.3 gr.	35.4 gr.		
IMR 4064	32.7 gr.	33.6 gr.	34.5 gr.	35.4 gr.	36.3 gr.	
IMR 4320	33.4 gr.	34.4 gr.	35.3 gr.			
WIN 748	33.4 gr.	34.7 gr.	35.9 gr.	37.1 gr.		
WIN 760		36.5 gr.	37.7 gr.	39.0 gr.	40.2 gr.	41.4 gr.
H414	37.6 gr.	38.6 gr.	39.6 gr.	40.6 gr.	41.5 gr.	

Indicates maximum load - use with caution

.22-250 REMINGTON - HORNADY BULLETS

55 GRAIN BULLETS:

SECTIONAL DENSITY:	.157
DIAMETER:	.224"

#2267 FMJ-BT w/c
Ballistic Coefficient — .243
C.O.L. — 2.350"



REDUCED LOAD

VELOCITY

POWDER	2100 fps	2200 fps	2300 fps	2400 fps	2500 fps	2600 fps
IMR 4227	13.9 gr.	14.8 gr.	15.7 gr.	16.6 gr.	17.6 gr.	18.5 gr.

60 GRAIN BULLETS:

SECTIONAL DENSITY:	.171
DIAMETER:	.224"

#2270 SP
Ballistic Coefficient — .264
C.O.L. — 2.350"



#2275 HP
Ballistic Coefficient — .271
C.O.L. — 2.350"



VELOCITY

POWDER	3100 fps	3200 fps	3300 fps	3400 fps	3500 fps	3600 fps
H4895	29.4 gr.	30.4 gr.	31.5 gr.	32.5 gr.	33.6 gr.	
IMR 3031	29.2 gr.	30.4 gr.	31.5 gr.	32.6 gr.	33.7 gr.	
AA 2460	28.0 gr.	29.4 gr.	30.9 gr.	32.3 gr.	33.7 gr.	
AA 2230	28.7 gr.	30.0 gr.	31.3 gr.	32.6 gr.	33.9 gr.	
IMR 4895	29.6 gr.	30.7 gr.	31.7 gr.	32.8 gr.	33.9 gr.	35.0 gr.
IMR 4064	30.6 gr.	31.6 gr.	32.7 gr.	33.8 gr.	34.8 gr.	35.9 gr.
H335	30.3 gr.	31.6 gr.	32.9 gr.	34.2 gr.		
IMR 4320	31.5 gr.	32.5 gr.	33.6 gr.	34.6 gr.		
WIN 748	30.7 gr.	32.1 gr.	33.6 gr.	35.1 gr.	36.5 gr.	
WIN 760		34.7 gr.	36.0 gr.	37.4 gr.	38.7 gr.	40.1 gr.
H414	35.5 gr.	36.6 gr.	37.6 gr.	38.7 gr.	39.7 gr.	40.7 gr.

Indicates maximum load - use with caution

22-250 Remington

By John A. Nosler

The .22-250 Remington is among my favorite cartridges for long range varmint shooting, having used it in its various forms over the past fifty years. Originally based on the 250-3000 Savage, this highly accurate, twenty-two caliber wildcat was standardized by Remington in the mid-sixties.

I don't consider the .22-250 a dependable deer cartridge, even though it will penetrate plate steel better than the .30-06. The lack of bullet weight really limits this and other .22s to coyote size animals.

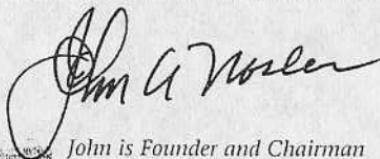
But give me a well-tuned rifle in .22-250, set me loose in varmint country and you'll see where this cartridge really shines!

In Central Oregon, we have some excellent rock chuck shooting with the added bonus of a healthy coyote population. This is heaven for the .22-250.

A good friend of mine, who also has the incurable addiction

for shooting chucks, was recently with me at my favorite shady spot doing what varmint hunters love to do best. We had one rock wall full of rock chucks at about 100 yards and another, out past 300 yards totally covered with the big brutes. I was shooting my favorite .22-250; my buddy was shooting his pet .223.

After felling some fifty chucks, we took a breather and ate a sandwich. During this quiet time, my friend spotted a white rock embedded near the top of the 300-plus-yard wall. After a little spirited conversation, my friend finally bet a fancy dinner that I couldn't dust that little white rock. The sporting man that I am, I upped the ante to include drinks if I could nail it on the first shot. After much care resting my rifle, I squeezed the trigger and . . . the dust flew! Boy, that good old .22-250 continues to amaze me.

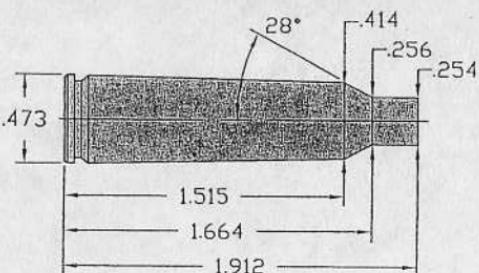


John is Founder and Chairman of Nosler®, Inc.



22-250 Remington

Test Information



RIFLE: Barrel: Lilja

Length: 24"

Twist: 1-14"

CASE: Winchester

PRIMER: Win. WLR

Comments from the lab

Due to the tapered body of the .22-250, cases are prone to stretch when full-length sized between each firing. Case life can be extended dramatically by using a neck die only, or a full-length die to just partially size the case. IMR 4895, RL 15, H 380, and Varget are all excellent powders for the .22-250. Varget is an exceptionally good choice because of its great tolerance for temperature changes.

The industry maximum overall cartridge length (O.A.L.) was established to assure proper feeding in modern sporting firearms. For the .22-250 Remington, this overall length has been established at 2.350". Optimum accuracy is usually achieved with a slightly longer cartridge length. Please refer to page 34 for additional information.

.22-250 REMINGTON - NOSLER BULLETS

Nosler®

40 Grain



40 gr. Solid Base®
Ballistic Tip® (orange)

*Most Accurate Load Tested

**Compressed Load

Ballistic Coefficient .221

Sectional Density .114

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
AA 2460	Max. 35.5	4050 fps	83%
	33.5	3833 fps	78%
	31.5*	3616 fps	73%
N 135	Max. 35.5	3967 fps	83%
	33.5	3729 fps	78%
	31.5*	3492 fps	73%
IMR 4895	Max. 36.0*	3961 fps	84%
	34.0	3678 fps	79%
	32.0	3395 fps	74%
VARGET (Most Accurate Powder Tested)	Max. 38.0	4100 fps	88%
	36.0	3863 fps	84%
	34.0*	3625 fps	79%
IMR 4320	Max. 36.5	3975 fps	85%
	34.5	3718 fps	80%
	32.5*	3462 fps	76%
N 140	Max. 37.5	4006 fps	87%
	35.5	3763 fps	83%
	33.5*	3519 fps	78%
IMR 4064	Max. 36.5	3958 fps	85%
	34.5	3655 fps	80%
	32.5*	3353 fps	76%
RL 15	Max. 37.0*	3990 fps	86%
	35.0	3711 fps	81%
	33.0	3431 fps	77%
W 760	Max. 41.0*	3997 fps	95%
	39.0	3750 fps	91%
	37.0	3503 fps	86%
H 380	Max. 41.0*	4070 fps	95%
	39.0	3776 fps	91%
	37.0	3482 fps	86%
H 414	Max. 41.0*	3946 fps	95%
	39.0	3696 fps	91%
	37.0	3446 fps	86%

Use Maximum Loads with Caution

.22-250 REMINGTON - NOSLER BULLETS

Nosler®

50 Grain



50 gr. Solid Base®
Ballistic Tip® (orange)

*Most Accurate Load Tested

**Compressed Load

Ballistic Coefficient .238
Sectional Density .142

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
IMR 3031	Max. 32.5	3692 fps	76%
	30.5	3477 fps	72%
	28.5*	3262 fps	67%
IMR 4895 (Most Accurate Powder Tested)	Max. 34.0*	3802 fps	80%
	32.0	3577 fps	75%
	30.0	3352 fps	70%
N 135	Max. 33.0	3611 fps	77%
	31.0	3396 fps	73%
	29.0*	3181 fps	68%
IMR 4064	Max. 34.5	3690 fps	81%
	32.5	3470 fps	76%
	30.5*	3250 fps	72%
IMR 4320	Max. 36.0*	3780 fps	85%
	34.0	3590 fps	80%
	32.0	3400 fps	75%
BL-C(2)	Max. 34.5*	3618 fps	81%
	32.5	3423 fps	76%
	30.5	3228 fps	72%
N 140	Max. 36.0*	3736 fps	85%
	34.0	3500 fps	80%
	32.0	3265 fps	75%
AA 2230	Max. 35.5	3740 fps	83%
	33.5	3500 fps	79%
	31.5*	3260 fps	74%
VARGET	Max. 36.0*	3794 fps	85%
	34.0	3604 fps	80%
	32.0	3415 fps	75%
H 380	Max. 36.0	3580 fps	85%
	34.0	3420 fps	80%
	32.0*	3260 fps	75%
IMR 4350	Max. 40.0	3800 fps	94%
	38.0	3590 fps	89%
	36.0*	3380 fps	85%

Use Maximum Loads with Caution

.22-250 REMINGTON - NOSLER BULLETS

Nosler®



55 Grain

55 gr. Solid Base®
Ballistic Tip® (orange)

*Most Accurate Load Tested

**Compressed Load

Ballistic Coefficient .267
Sectional Density .157

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
IMR 3031	Max. 32.0	3608 fps	75%
	30.0	3403 fps	71%
	28.0*	3198 fps	66%
N 135	Max. 33.0	3483 fps	78%
	31.0	3292 fps	73%
	29.0*	3102 fps	68%
BL-C(2)	Max. 34.5*	3589 fps	81%
	32.5	3430 fps	77%
	30.5	3271 fps	72%
IMR 4895	Max. 34.0*	3602 fps	80%
	32.0	3357 fps	75%
	30.0	3112 fps	71%
IMR 4064	Max. 34.5	3603 fps	81%
	32.5	3407 fps	77%
	30.5*	3211 fps	72%
AA 2460	Max. 34.5	3598 fps	81%
	32.5	3383 fps	77%
	30.5*	3168 fps	72%
IMR 4320	Max. 35.5*	3690 fps	84%
	33.5	3480 fps	79%
	31.5	3270 fps	74%
VARGET	Max. 35.0	3635 fps	83%
	33.0	3454 fps	78%
	31.0*	3273 fps	73%
N 140	Max. 34.0	3464 fps	80%
	32.0	3279 fps	75%
	30.0*	3095 fps	71%
(Most Accurate Powder Tested)	Max. 35.5*	3540 fps	84%
	33.5	3340 fps	79%
	31.5	3140 fps	74%
IMR 4350	Max. 39.0*	3608 fps	92%
	37.0	3423 fps	87%
	35.0	3238 fps	83%

Use Maximum Loads with Caution

22-250 Rem. Ackley Improved

By Steve Timm

If you're not allergic to wildcats and want a truly spectacular high-performance varmint cartridge, the .22-250 Ackley Improved is worthy of your attention. From a ballistic standpoint, this fire-formed version of the standard .22-250 Remington essentially duplicates the performance of the venerable .220 Swift.

There are a lot of reasons to like the .22-250 Ackley.

Obviously, it is capable of sizzling velocity levels that result in a laser-flat trajectory and amazing kills on varmints. Not so obvious, however, are the characteristics that make the cartridge ideal for handloading.

After the initial fire-forming in the Improved chamber, the .22-250 Ackley leaves the breech sporting a jaunty forty-degree shoulder and a minimum taper case body. The new case configuration has a much larger powder capacity than the original .22-250 Remington. More important, at least in my opinion, is that the Improved design greatly reduces case stretching and bolt thrust.

Varmint hunters handload in great volume and the reduction in case stretching is a real godsend. The decrease in bolt thrust greatly extends action life because it minimizes stress on the locking lugs and recesses.

One advantage that the .22-250 Improved has over the other large .22 caliber wildcats is its ability to fire factory-loaded .22-250 Remington ammo. Sure, the factory .22-250 ammo will not live up to the ballistic capabilities of the Improved chamber, but it will fire in the rifle and usually the accuracy is surprisingly good. There are

times when *any* ammo is better than no ammo.

I've owned three rifles chambered for .22-250 Ackley. For many years, I loaded 50-grain Ballistic Tips. The particular load in question yielded 3,925 fps and was deadly on rock chucks.

Later, I tried the 40-grain Ballistic Tip® and fell in love. My current Schneider-barrelled rifle gives superb accuracy, using Winchester 748, and launches forty-grainers in excess of 4,200 fps. It's so flat that you seldom aim off of hair, for fear of missing the critter.

The .22-250 Ackley Improved might be a little exotic for some shooters. As for me, you'll always find at least one .22-250 Improved in the front row of my gun safe.

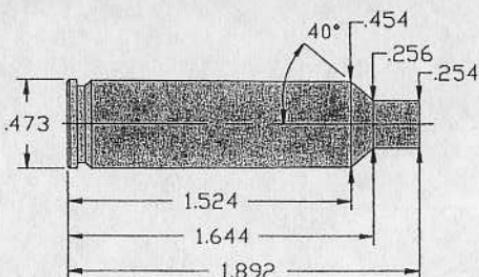


Steve Timm

Steve is a Contributing Editor for The Varmint Hunter magazine.

22-250 Rem. Ackley Improved

Test Information



RIFLE: Barrel: Shilen

Length: 26"

Twist: 1-14"

CASE: Winchester (22-250)

PRIMER: Rem. 9 1/2

Comments from the lab

To fire-form cases for the .22-250 Ackley Improved, we suggest the following procedure:

- Start with standard .22-250 Remington cases.
- Use at least 50-grain bullets. Lighter bullets are generally too short to reach the lands.
- Select a light load of a relatively fast powder (IMR 4895 is great) from the standard .22-250 Remington data.
- Seat the bullet well into the rifling so it makes good contact with the lands when the cartridge is chambered. This holds the case head against the bolt face and eliminates case stretching in the web area, a cause of case head separation.
- After fire-forming, follow load data for the 22-250 Remington Ackley Improved.

For serious varmint work, nothing can rival the Ballistic Tip's ability to be fired at **any** velocity! Under strict laboratory conditions, we have pushed our .22 caliber Ballistic Tips to over 4900 FPS. These velocities were attained without sacrificing integrity, or accuracy!

All loads listed were worked up in a standard Ackley Improved chamber and were based on the Sporting Arms and Ammunition Institute maximum average pressure limit for a standard .22-250 Remington (65,000 P.S.I.).

There is no industry standard maximum overall cartridge length for this cartridge. Please refer to page 34 for additional information.

22-250 Rem. Ackley Improved - 22 Cal. (.224")

Load Data

Nosler®**40 Grain**40 gr. Solid Base®
Ballistic Tip® (orange)Ballistic Coefficient .221
Sectional Density .114

*Most Accurate Load Tested

**Compressed Load

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
N 135	Max. 39.5	4199 fps	82%
	37.5	4003 fps	78%
	35.5*	3806 fps	74%
RL 12	Max. 41.0	4272 fps	85%
	39.0	4055 fps	81%
	37.0*	3839 fps	77%
W 748	Max. 42.0*	4217 fps	87%
	40.0	4053 fps	83%
	38.0	3888 fps	79%
(Most Accurate Powder Tested)	Max. 41.0*	4124 fps	85%
	39.0	3883 fps	81%
	37.0	3642 fps	77%
H 380	Max. 46.5	4129 fps	97%
	44.5	3955 fps	93%
	42.5*	3781 fps	88%

Use Maximum Loads with Caution

.22-250 REMINGTON - NOSLER BULLETS



50 Grain



50 gr. Solid Base®
Ballistic Tip® (orange)

*Most Accurate Load Tested

**Compressed Load

Ballistic Coefficient .238
Sectional Density .142

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
RL 12	Max. 37.5	3887 fps	80%
	35.5	3715 fps	76%
	33.5*	3543 fps	71%
IMR 4895 (Most Accurate Powder Tested)	Max. 40.0*	3951 fps	85%
	38.0	3745 fps	81%
	36.0	3539 fps	77%
VARGET	Max. 40.0*	3922 fps	85%
	38.0	3730 fps	81%
	36.0	3539 fps	77%
AA 2700	Max. 43.5	3812 fps	93%
	41.5	3650 fps	88%
	39.5*	3489 fps	84%



55 Grain

55 gr. Solid Base®
Ballistic Tip® (orange)

*Most Accurate Load Tested

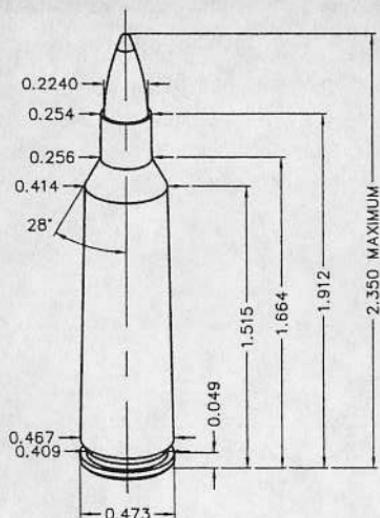
**Compressed Load

Ballistic Coefficient .267
Sectional Density .157

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
RL 15 (Most Accurate Powder Tested)	Max. 38.5	3788 fps	82%
	36.5	3642 fps	78%
	34.5*	3497 fps	73%
IMR 4064	Max. 39.0*	3787 fps	83%
	37.0	3603 fps	79%
	35.0	3419 fps	74%
N 140	Max. 39.0	3753 fps	83%
	37.0	3597 fps	79%
	35.0*	3441 fps	74%
H 414	Max. 44.5	3753 fps	95%
	42.5	3552 fps	90%
	40.5*	3351 fps	86%

Use Maximum Loads with Caution

22-250 Remington



Test Specifications

Firearm Used: Winchester M70

Bbl. Length/Twist: 26"/1x14"

Firearm Used: Winchester M70

Bbl. Length/Twist: 26"/1x10" (69 grain HPBT)

Test Components

Cases: Remington

Trim-to Length: 1.900"

Primers: Remington 9 1/2

Remarks:

Many of today's most popular cartridges began as wildcats and the .22-250 Remington is one of the best examples. While the .250-3000 Savage case had been necked down to .22 caliber by several earlier wildcatters, credit goes to Jerry Gebby for finalizing the version which Remington eventually standardized in 1965. Gebby went so far as to copyright the name "Varminter" in promoting the new cartridge. Rarely mentioned today is the fact that Gebby actually produced three different Varminter cartridges, each intended for different ranges and performance levels. The cartridge we know today as the .22-250 Remington was known as the .22 Standard Varminter. Gebby also chambered what he called the .22 Senior Varminter, a .257 Roberts necked down to accept .224 diameter bullets. For shorter range use, Gebby produced the .22 Junior Varminter, a .32-40 Ballard case necked down to .22 caliber. Today, only the .22 Standard Varminter survives. Given the performance of the .22-250, it is difficult to understand why it took so long for a major manufacturer to adopt it. The cartridge had been popular as a benchrest chambering in the early days of the game, and was very well known and quite popular among varmint hunters.

The .22-250 has always had a reputation as an accurate, flat-shooting, and hard-hitting varmint cartridge. When loaded to its top velocity levels, the .22-250 is good to 400 yards or better on varmints as large as coyotes. Sierra's line of .22 caliber bullets allow the handloader to optimize performance for their particular shooting situation. Some cautions, however, do apply. While we have included data for the 69 grain MatchKing, this bullet *requires* a rifling twist of 1x10" or faster for proper stabilization. When using 50 and 55 grain Blitz bullets, we recommend velocities be kept under the 3600 fps level to prevent potential bullet

22-250 Remington, continued

disintegration in flight. The .22-250 is still one of our most popular varmint cartridges, and will undoubtedly remain so for many years to come.

.224 40 gr. HP
Cartridge OAL: 2.300"



Powder¹ / Velocity →	3600	3700	3800	3900	4000	4100
RE-7	27.9	28.9	29.9	30.9	31.8	32.7
IMR-3031	32.0	32.9	33.8	34.7	35.6	36.5
BL-C(2)		35.1	36.2	37.4	38.6	39.7
AA-2460	34.5	35.3	36.1	37.0	37.9	
IMR-4895	33.6	34.6	35.5	36.4	37.3	
Viht N135	34.2	35.0	35.8	36.6	37.5	
IMR-4064	36.0	36.5	37.0	37.5	38.0	
IMR-4320	34.4	35.5	36.5	37.5	38.5	
AA-2520	34.6	35.4	36.3	37.2	38.1	
Viht N140	36.0	36.8	37.6	38.4	39.2	40.0
H380		37.3	38.2	39.1	40.0	40.9
Energy/ft.lbs.	1151	1216	1282	1351	1421	1493

Accuracy Load: IMR-4064/37.0 grs.; 3800 fps/1282 ft.lbs.

Hunting Load: H380/39.1grs.; 3900 fps/1351 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 45 gr. Semi-Pointed

Cartridge OAL: 2.320"



.224 45 gr. Spitzer

Cartridge OAL: 2.350"



Powder↓ / Velocity →	3500	3600	3700	3800	3900	4000
IMR-4198	26.9	27.9	28.9	29.9	30.9	
RE-7		28.9	30.0	31.2		
IMR-3031	30.5	31.5	32.6	33.7	34.8	
748	33.5	34.6	35.7	36.8		
BL-C(2)		32.0	33.1	34.2	35.3	36.5
AA-2460	33.5	34.5	35.5	36.5		
IMR-4895	33.5	34.2	34.9	35.7	36.5	
Viht N135	33.6	34.6	35.6	36.6	37.5	
IMR-4064	34.0	34.8	35.6	36.4	37.2	
IMR-4320	34.1	35.1	36.1	37.1		
AA-2520	34.0	35.2	36.4	37.5		
Viht N140		35.1	36.4	37.7	39.0	40.2
H380			36.5	37.7	39.0	40.3
760	39.4	40.1	40.9	41.7		
<i>Energy/ft.lbs.</i>	<i>1224</i>	<i>1295</i>	<i>1368</i>	<i>1443</i>	<i>1520</i>	<i>1598</i>

Accuracy Load: IMR-4064/36.4 grs.; 3800 fps/1443 ft.lbs.

Hunting Load: BL-C(2)/35.3 grs.; 3900 fps/1520 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 50 gr. Semi-Pointed

Cartridge OAL: 2.320"



.224 50 gr. Spitzer

Cartridge OAL: 2.350"



.224 50 gr. Blitz

Cartridge OAL: 2.350"



Powder ↓ / Velocity →	3400	3500	3600	3700	3800	3900
RE-7		28.3	29.4	30.6		
IMR-3031	31.6	32.4	33.2	34.0	34.8	35.6
AA-2230	32.9	33.8	34.7	35.7		
748	34.1	35.0	35.9	36.8		
BL-C(2)		32.0	33.1	34.2	36.3	
AA-2460	33.1	34.1	35.1	36.1		
IMR-4895	31.9	32.9	33.9	34.9	36.0	
Viht N135	32.9	33.9	34.9			
IMR-4064	33.4	34.2	35.0	35.8	36.6	
IMR-4320	32.9	34.1	35.3	36.5		
AA-2520	34.1	35.1	36.1	37.0		
Viht N140	34.2	35.3	36.4	37.4		
H380			36.4	37.5	38.7	39.9
760	38.2	39.0	39.9	40.8		
H450	40.5	41.8	43.2	44.6		
<i>Energy/ft.lbs.</i>	<i>1283</i>	<i>1360</i>	<i>1439</i>	<i>1520</i>	<i>1603</i>	<i>1688</i>

Accuracy Load: IMR-4064/35.8 grs.; 3700 fps/1520 ft.lbs.

Hunting Load: H380/38.7 grs.; 3800 fps/1603 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 52 gr. MatchKing HPBT
Cartridge OAL: 2.350"



.224 53 gr. MatchKing HP
Cartridge OAL: 2.350"



Powder ↓ / Velocity →	3300	3400	3500	3600	3700	3800
RE-7	26.6	27.8	29.0	30.3		
IMR-3031	31.0	31.8	32.6	33.4	34.2	
748	32.8	33.8	34.8	35.8		
BL-C(2)	32.7	33.7	34.7	35.7		
AA-2460	32.4	33.4	34.4	35.4		
IMR-4895	31.7	32.7	33.7	34.7	35.7	
Viht N135	32.5	33.5	34.5			
IMR-4064	32.5	33.3	34.1	34.9	35.8	
AA-2520	33.7	34.5	35.3	36.1		
IMR-4320	33.3	34.3	35.3	36.3		
Viht N140	33.8	34.8	35.8	36.7		
H380		34.6	35.7	36.9	38.1	39.3
760	37.6	38.4	39.2	40.0		
H450		41.0	42.3	43.6	45.0	
<i>Energy/ft.lbs.</i>	<i>1281</i>	<i>1360</i>	<i>1441</i>	<i>1525</i>	<i>1611</i>	<i>1699</i>

Accuracy Load: IMR-4064/34.1 grs.; 3500 fps/1441 ft.lbs.

Sierra does not recommend MatchKing bullets for hunting applications

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 55 gr. Blitz
Cartridge OAL: 2.350"



.224 55 gr. Semi-Pointed
Cartridge OAL: 2.320"



.224 55 gr. FMJBT
Cartridge OAL: 2.350"



.224 55 gr. Spitzer BT
Cartridge OAL: 2.350"



.224 55 gr. Spitzer
Cartridge OAL: 2.350"



.224 55 gr. HPBT
Cartridge OAL: 2.320"



Powder ↓ / Velocity →	3300	3400	3500	3600	3700
RE-7	26.5	27.7	29.0	30.3	
IMR-3031	30.8	31.6	32.5	33.4	34.3
AA-2230	31.7	32.8	33.9	34.7	
748		33.0	34.3	35.5	36.8
AA-2460	31.5	32.5	33.5	34.5	
BL-C(2)	31.9	33.1	34.3	35.5	
IMR-4895	31.9	32.8	33.7	34.6	35.5
Viht N135	32.7	33.7	34.7		
IMR-4064	33.2	34.2	35.2	36.2	
AA-2520	33.5	34.5	35.5	36.5	
IMR-4320	33.3	34.2	35.2	36.2	
Viht N140	33.9	34.9	35.9	37.0	
Viht N540	33.5	34.6	35.7	36.8	
H380		34.2	35.4	36.7	38.0
760			37.3	38.7	40.1
H450	39.6	40.9	42.2	43.6	
Energy/ft.lbs.	1330	1412	1496	1582	1672

Accuracy Load: IMR-4064/35.2 grs.; 3500 fps/1496 ft.lbs.

Hunting Load: IMR-4895/34.6 grs.; 3600 fps/1582 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 60 gr. HP

Cartridge OAL: 2.350"



Powder ↓ / Velocity →	3100	3200	3300	3400	3500	3600
RE-7	25.3	26.7	28.1	29.5		
IMR-3031	29.1	30.1	31.1	32.1	33.1	34.0
748	32.1	33.2	34.3	35.4	36.5	37.6
AA-2460	31.0	32.0	33.0	34.0	35.0	
BL-C(2)		30.9	32.3	33.7	35.0	
IMR-4895	30.1	31.4	32.7	34.0	35.3	36.5
IMR-4064	30.7	31.7	32.7	33.7	34.7	35.6
IMR-4320	31.4	32.6	33.8	34.9	36.0	
AA-2520		31.5	33.0	34.5	36.0	
Viht N140	31.6	32.9	34.2	35.4		
H380			33.7	35.1	36.4	37.7
760	35.7	36.9	38.1	39.2	40.3	
H414	35.6	36.9	38.1	39.3	40.5	
Viht N150	31.3	32.2	33.1	34.0		
Viht N550	33.7	34.7	35.7	36.7	37.7	
Energy/ft.lbs.	1280	1364	1451	1540	1632	1726

Accuracy Load: IMR-4064/33.7 grs.; 3400 fps/1540 ft.lbs.

Hunting Load: IMR-4064/34.7 grs.; 3500 fps/1632 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Remington, continued

.224 63 gr. Semi-Pointed

Cartridge OAL: 2.350"



Powder ↓ / Velocity →	3000	3100	3200	3300	3400	3500
RE-7	25.2	26.2	27.2	28.3		
IMR-3031	28.6	29.5	30.5	31.5	32.5	33.5
AA-2460	30.0	31.1	32.3	33.4		
IMR-4895	29.4	30.5	31.6	32.7	33.7	34.7
IMR-4064	30.1	31.0	32.0	33.0	34.0	35.0
IMR-4320	30.9	31.9	32.9	33.9	35.0	
AA-2520	30.5	31.7	32.3	34.0		
Viht N140	30.9	32.0	33.1	34.2		
H380		32.0	33.2	34.4	35.6	36.8
760		35.7	36.7	37.7	38.8	
Viht N150	31.6	32.6	33.6	34.6	35.6	
IMR-4350		35.4	36.6	37.9	39.2	
H450		37.9	39.2	40.5	41.9	
<i>Energy/ft.lbs.</i>	<i>1259</i>	<i>1344</i>	<i>1432</i>	<i>1523</i>	<i>1617</i>	<i>1713</i>

Accuracy Load: IMR-4064/33.0 grs.; 3300 fps/1523 ft.lbs.

Hunting Load: IMR-4064/34.0 grs.; 3400 fps/1617 ft.lbs.

.224 69 gr. MatchKing HPBT

Cartridge OAL: 2.350"



Powder ↓ / Velocity →	3000	3050	3100	3150	3200	3250
AA-2015 BR	28.8	29.3	29.7	30.2		
IMR-4064	31.3	31.7	32.1	32.5	32.9	
AA-2520	31.1	31.6	32.0	32.5		
AA-2700	33.0	33.5	34.0	34.5		
760	33.4	34.3	34.8	35.3	35.8	
H414	35.1	35.7	36.3	36.8	37.3	
IMR-4350	34.1	34.6	35.0	35.4	35.8	36.2
H450	37.7	38.2	38.7	39.2	39.7	
<i>Energy/ft.lbs.</i>	<i>1379</i>	<i>1425</i>	<i>1472</i>	<i>1520</i>	<i>1569</i>	<i>1618</i>

Accuracy Load: IMR-4064/32.5 grs.; 3150 fps/1520 ft.lbs.

Sierra does not recommend MatchKing bullets for hunting applications

INDICATES MAXIMUM LOAD - USE CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

This classic, long-range varmint cartridge started life as a wildcat. Although there is some question about who actually invented the cartridge and when it occurred, varmint shooters all agree that the result is no less than spectacular.

In the 1930's a number of experimenters worked to develop a 22 caliber centerfire cartridge based on the efficient 250 Savage case. Although each version was slightly different, the ballistic performance of these early variants were similar. J.E. Gebby trademarked the name "22 Varminter" for his version; other "wildcatters" simply tacked on the name of the parent cartridge and called the cartridge the 22-250.

In 1965, Remington announced that it would introduce the 22-250 as a factory cartridge, although some time earlier Browning offered bolt action rifles chambered for the wildcat version.

Factory ammunition has a nominal velocity of 3650 feet/sec with a 55 grain bullet, although Federal lists a 40 grain load at nearly 4000 feet/sec! The 22-250 is effective on varmints to ranges beyond 300 yards. Most rifles give exceptional accuracy and the 22-250 is every bit as effective as the famed 220 Swift cartridge in terminal performance. Many reloaders claim the 22-250 offers longer case and barrel life than the Swift and cases and factory ammunition are easier to find.

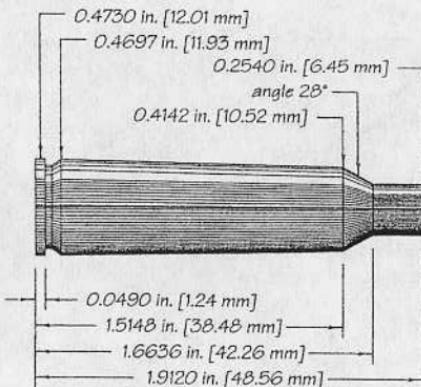
The 52 grain Speer hollow point is a very popular varmint bullet in the 22-250. The 22-250 is also powerful enough to stabilize Speer's long 70 grain semi-spitzer. We get reports of this combination being used on deer but don't consider this an adequate deer cartridge unless the animals are quite small.

Although the 50 grain Speer TNT™ hollow point is not generally recommended at 22-250 velocities, we know of a number of reloaders who can get 3600-3700 ft/sec from the TNT without problems. Bore smoothness varies from gun to gun, and this seems to be the key factor in using the TNT in a 22-250.

Although factory brass is readily available, some 22-250 shooters still form their own from 308, 30-06 or 250. Reformed cases have less capacity than factory 22-250 cases and loads should be reduced 5 to 10 percent and tested. Custom rifles made before the cartridge was standardized will have dimensional variations in the chambers. Work loads up carefully in these rifles.

These loads do not exceed the industry working pressure of 53,000 cup.

.22-250 REMINGTON - SPEER BULLETS



Max. Case Length: 1.930"
Trim-to Length: 1.912"
Max. Cart. Length: 2.350"
RCBS Shellholder: #3
Barrel Length: 24"
Twist: 1-14"

Test Firearm: Remington Model 700
Case: R-P
Primers: CCI 200, 250
Comments: TNT bullet not recommended for velocities over 3400 fps.



.224" Dia.

40 Grain

Sect. Density .114

	22 Spire-SP						
Ballistic Coefficient	0.144						
C.O.L. Tested At	2.235"						
Speer Part No.	1017						

Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.
Varget	39.0	4090	IMR 4320	40.0	3930	IMR 4064	38.0	3830
AA 2460*	35.0	3582		36.0	3360		34.0	3390
	38.0	4033		39.0	3912		43.0C	3796
	34.0	3468	Re12	35.0	3403	H380*	39.0	3284
Re15	40.0	4027	AA 2520*	37.0	3910		37.0	3748
	36.0	3443		33.0	3382	H335*	33.0	3280
H4895	38.0	4025		39.5	3867	IMR 3031	36.0	3746
Viht. N135	34.0	3542	748*	35.5	3403		32.0	3315
	37.0	3958		42.0	3841	Reduced Load SR	11.0	1979
	33.0	3463	760*	38.0	3342	4759	9.0	1641

Notes: Bold print denotes maximum loads. They should be used with caution.

* CCI Magnum Primer used with this powder.

C = Compressed Load

.22-250 REMINGTON - SPEER BULLETS



.224" Dia.

45 Grain

Sect. Density .128

	22 Spitz-SP						
Ballistic Coefficient	0.167						
C.O.L. Tested At	2.235"						
Speer Part No.	1023						

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
AA 2460*	37.5	3898	H380*	42.5C	3748	H414*	41.5C	3659
	33.5	3333		38.5	3317		37.5	3183
	39.0	3897		38.0	3712		36.0	3647
Re15	35.0	3351	Re12	34.0	3211	IMR 4895	32.0	3209
	37.5	3881		38.5	3708		37.5	3633
	33.5	3345		748*	34.5	3170	33.5	3179
IMR 4320	39.5	3867	760*	41.5C	3693	IMR 3031	35.5	3628
	35.5	3364		37.5	3194		31.5	3211
	36.5	3832		IMR	37.5	3665	11.5	1984
Viht. N135	32.5	3372	4064	33.5	3207	Reduced Load SR	9.5	1656



.224" Dia.

50 Grain

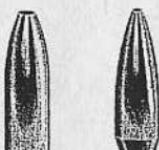
Sect. Density .142

	22 Spitz-SP							
Ballistic Coefficient	0.231							
C.O.L. Tested At	2.350"							
Speer Part No.	1029							

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
AA 2460*	37.0	3804	AA 2230	35.0	3685	IMR 4320	38.0	3603
	33.0	3355		31.0	3188		34.0	3117
	36.5	3796		41.0	3636		38.0	3601
Varget	32.5	3283	760*	37.0	3218	748*	34.0	3079
	38.0	3736		37.0	3625		35.5	3561
	34.0	3209		33.0	3136		31.5	3116
Re15 N135	36.0	3693	Re12	37.0	3615	BL-C(2)*	37.0	3558
	32.0	3231		33.0	3091		33.0	3149
	42.0C	3693		41.0	3604		12.0	1982
H380*	38.0	3229	H414*	37.0	3081	Reduced Load SR	10.0	1650

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

.22-250 REMINGTON - SPEER BULLETS



.224" Dia.

52 Grain

Sect. Density .147

	22 HP	22 Match HP-BT				
Ballistic Coefficient	0.225	0.253				
C.O.L. Tested At	2.350"	2.350"				
Speer Part No.	1035	1036				

Powder	Wt. Grs.	MzI.Vel.	Powder	Wt. Grs.	MzI.Vel.	Powder	Wt. Grs.	MzI.Vel.
IMR 3031	36.0	3715		42.0C	3700		40.5	3597
	32.0	3251	H380*	38.0	3164	H414*	36.5	3093
	38.0	3714	Viht.	37.5	3674		36.5	3574
748*	34.0	3231	N140	33.5	3233	Re12	32.5	3092
	36.5	3713		37.5	3662	IMR	36.5	3563
H4895	32.5	3230	Re15	33.5	3204	4064	32.5	3064
AA 2460*	36.5	3711	Viht.	35.5	3610	IMR	37.5	3559
	32.5	3173	N135	31.5	3177	4320	33.5	3150
	36.0	3706		40.5	3607	IMR	35.0	3526
Varget	32.0	3338	760*	36.5	3120	4895	31.0	3121

Notes: Bold print denotes maximum loads. They should be used with caution.

* CCI Magnum Primer used with this powder.

C = Compressed Load

.22-250 REMINGTON - SPEER BULLETS



.224" Dia.

55 Grain

Sect. Density .157

	22					
	Spitz-SP					
Ballistic Coefficient	0.255					
C.O.L. Tested At	2.350"					
Speer Part No.	1047					

Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.
IMR 3031	36.0	3663		36.0	3630		36.0	3456
	32.0	3132	H4895	32.0	3104	Re12	32.0	3059
AA 2460*	36.0	3662	Viht. N140	37.0	3582		39.5	3449
	32.0	3168		33.0	3134	760*	35.5	2949
748*	38.0	3658		36.0	3532	IMR 4895	35.0	3421
Varget	34.0	3237	H335*	32.0	3091		31.0	2993
	36.0	3655	AA 2520*	34.0	3476	IMR 4350	40.0C	3403
	32.0	3260		30.0	2972		36.0	3012
	42.0C	3633	IMR 4064	36.0	3467	Reduced Load SR	13.0	2002
H380*	38.0	3143		32.0	2999	4759	11.0	1688

Notes: Bold print denotes maximum loads. They should be used with caution.

* CCI Magnum Primer used with this powder.

C = Compressed Load

.22-250 REMINGTON - SPEER BULLETS



NOTE: Make certain that bullet
does not contact rifling.

.224" Dia.

70 Grain

Sect. Density .199

**22 Semi
Spitz SP**

Ballistic Coefficient	0.214							
C.O.L. Tested At	2.330"							
Speer Part No.	1053							
Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.	Powder	Wt. Grs.	MzL.Vel.
H414*	39.0	3300	IMR 4064	33.5	3079	AA 2460*	31.0	2964
	35.0	2888		29.5	2725		27.0	2623
IMR 4320	35.0	3158	Viht. N140	33.0	3064	Re12	31.0	2930
	31.0	2701		29.0	2666		27.0	2578
IMR 4831	39.0	3135	IMR 4895	32.0	3052	H335*	31.0	2908
	35.0	2727		28.0	2671		27.0	2486
IMR 4350	38.0C	3126	IMR 3031	32.0	3018	AA 2520*	30.0	2838
	34.0	2751		28.0	2611		26.0	2441
H380*	37.0	3083	748*	33.5	3011	Reduced Load SR	15.0	1939
	33.0	2651		29.5	2665		13.0	1711

Notes: Bold print denotes maximum loads. They should be used with caution.

* CCI Magnum Primer used with this powder.

C = Compressed Load

Reloading Data Introduction:

The data listed in this section have been tested by our technicians and found to be safe when loaded with our test components and fired (under our laboratory controlled conditions) in our testing equipment. Since Lyman Products Corporation has no control over the manufacture of the various components listed, the actual loading, choice or condition of the firearms and components used, no responsibility for use of this data is implied or assumed.

Components:

The reader should bear in mind that the components listed are not of Lyman manufacture. Therefore, it is impossible that production changes affecting ballistic performance can occur at any time without our knowledge. If there is ever a question as to the correctness of the component specified, write to its manufacturer.

Starting Load:

It is essential that the reader begin with the suggested weight of powder listed in this bracket and work up slowly (following load development precautions) to his best performing load. The novice should use only the "starting load" for a period of time until he builds confidence and experience. Never decrease this charge as an increase in pressure could be encountered.

Maximum Load:

All loads which are listed as maximum were tested and classified as maximum by our technicians in accordance with our laboratory standards. **Under no circumstances should these loads be exceeded**, nor should they be quickly accepted by the reader as a safe working maximum for his particular rifle or pistol.

Many reloaders misinterpret the meaning of the "maximum load." They wrongly assume that if a high pressure load proved safe in a test laboratory then it is equally safe under any and all conditions. This is not true. The reader must start with the "starting load" and work up his load carefully. Working with his particular firearm and component combination, he may encounter signs of excess pressure before he reaches the maximum charge listed.

The technician classifies a load as maximum after carefully considering many aspects of its ballistic performance. **The maximum average pressure of the load is not the only criteria.** Often a load having an acceptable maximum average pressure will be rejected (or reduced) due to its erratic performance. Accuracy must also be considered, particularly when dealing with cast lead alloy bullets. In all instances, the maximum listing represents what our technicians consider to be the maximum working combination for the bullet, powder and caliber listed. These loads do not exceed SAAMI standards.

Accuracy Loads:

When a load is noted as such in the data tables proper, it means that the given combination of components produced the most uniform internal ballistics of any load tested utilizing that particular bullet design.

Unless noted in "Comments," the accuracy load was not fired at targets. The load, however, does have a high potential—assuming all external factors are optimum—for producing outstanding accuracy since uniform internal ballistics are critical to accuracy on target. You cannot have one without the other.

Test Parameters:

Velocities shown were taken at fifteen feet and not corrected to the muzzle.

Each test string began with a clean dry barrel and consisted of ten shots.

Loads exhibiting erratic internal ballistics were not pursued.

We had no problem with leading in any of our testing.

Bullets:

Bullet numbers are listed in the introductory specifications for each cartridge and in the headline above the appropriate data block—along with an illustration of that particular bullet.

Please note these bullets are artists' rendering. Comparing your bullet against the drawing could reveal minor differences. Furthermore, minor changes are sometimes made to bullets. These drawings, which appear throughout the data sections, are for general reference only and are not intended to be a precise representation.

Bullet alloy is noted as is the exact weight of each tested bullet.

Not all cast bullets within a given caliber are intended to perform equally. We have used them in the most appropriate chamberings.

Powders:

We have limited our testing to those powders which are manufactured in the United States and which are readily available to the consumer. The following brands are listed: Dupont (now IMR), Winchester, Hercules, Alcan, Hodgdon and Gearhart-Owen.

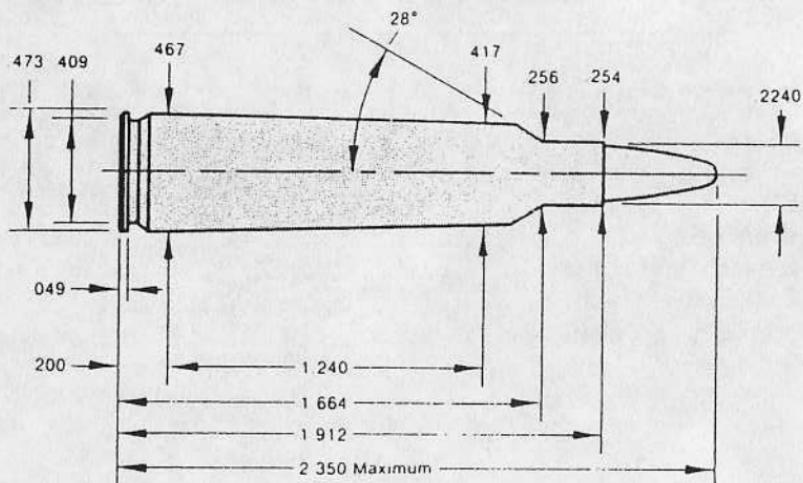
Compressed Loads:

All compressed loads are indicated with a +. Depending upon the volume of the specific cartridge case used by the reader, he may, or may not, have difficulty starting bullets in such loads. If the bullet will not start, reduce the load sufficiently so that 1/10" of space remains in the case neck. Start the bullet into the case and use whatever additional pressure is required to fully seat the bullet. Failure to comply could result in a bulged case.

Filler Wads:

Dacron filler wads in the form of 1/4-inch thick batting were used in conjunction with cast bullet loads, where indicated. This material can be purchased in most yard-goods stores. It should be cut into squares, which seal the case.

When developing a load, if a wad is desired, its should be used from the beginning as the charge weight is increased. It should never be added as an afterthought, once a maximum load has been established, since its presence could result in a pressure increase of 2,000 CUP or more.



COMMENTS:

This is one of the best choices for a long range 22 caliber varmint rifle. Accuracy is generally excellent and its flat trajectory makes hitting small targets easier — even up to 300 yards.

Jacketed bullets of 50 grains or heavier are best. First recommendation on powder would be Hodgdon H380. In fact, a charge of 38.0 grains with a 55 grain bullet has become legendary. It began when Bruce Hodgdon first tried it and found it so accurate that he named the powder after the 38.0 grain charge — H380.

The data listed are intended only for standard chambers as manufactured to current industry specifications. Early chambers marked 22-250 or Varminter may differ from current standards by a substantial amount, to the point that this data may prove unsafe in such firearms.

Cast bullet #225646 at about 2,100 fps. is the best choice for lead bullet use in this cartridge, as it is in several other 22 caliber cartridges.

.22-250 REMINGTON - LYMAN BULLETS

TEST COMPONENTS:

Cases	Winchester
Trim-to Length	1.902"
Primers	Winchester 8½-120
Primer Size	Large Rifle
Lyman Shell Holder	No. 2
Cast Bullets Used	(size to .224" dia.)
*Gas Check Bullet	*#225107, 37 gr. *#225438, 41 gr. *#225415, 45 gr. *#225462, 54 gr. *#225646, 55 gr.

TEST SPECIFICATIONS:

(Velocity & Pressure)

Firearm Used	Universal Receiver
Barrell Length	24"
Twist	1-14"
Groove Diameter224"



#225107

37 gr., (#2 Alloy) 2.195" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	7.2	2260	19,800	9.5	2634	33,500
700X	7.0	2222	21,600	9.0	2527	32,500
Green Dot	7.5	2250	17,100	10.0	2624	32,500
PB	7.5	2211	22,200	9.5	2485	32,000
SR-7625	7.5	2158	20,400	10.0	2586	36,000
SR-4756	8.0	2064	15,400	11.0	2646	31,000
630	12.4	1975	7,900	15.5	2693	16,300
IMR-4227	15.0	2044	6,900	20.3	2748	15,800
IMR-4198	*17.7	2107	7,900	23.3	2749	14,300

Note: Loads shown in shaded panels are maximum.

* Designates potentially most accurate load.

.22-250 REMINGTON - LYMAN BULLETS



#225438
41 gr., (#2 Alloy) 2.266" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	7.2	2079	17,100	9.5	2404	32,000
700X	7.0	2021	17,100	9.0	2354	32,000
Green Dot	7.5	2050	15,400	10.0	2413	30,000
PB	7.5	1997	17,100	9.5	2277	30,000
SR-7625	7.5	1982	15,400	10.0	2362	35,000
SR-4756	8.0	1936	15,400	11.0	2445	31,000
630	9.0	1840	—	11.0	2090	15,400
SR-4759	15.2	2290	14,400	18.5	2807	22,300
IMR-4227	14.0	2151	12,300	20.1	2945	23,500
IMR-4198	16.9	2173	10,700	21.1	2739	20,200
748	21.4	2174	11,200	26.8	2764	18,800



#225415
45 gr., (#2 Alloy) 2.325" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	7.2	1981	22,800	9.5	2323	35,000
700X	7.0	1850	18,000	9.0	2268	33,500
Green Dot	7.5	1992	21,000	10.0	2356	34,500
PB	7.5	1920	18,000	9.5	2188	31,000
SR-7625	8.0	1981	20,400	10.0	2237	36,900
SR-4756	8.0	1915	18,000	11.0	2308	32,000
SR-4759	14.5	2176	13,000	19.0	2820	26,900
IMR-4198	16.9	2173	12,100	22.1	2867	23,900
748	22.3	2175	13,600	28.5	2814	21,500

Note: Loads shown in shaded panels are maximum.

.22-250 REMINGTON - LYMAN BULLETS



#225462

54 gr., [#2 alloy] 2.347" OAL

POWDER	Sugg.	Velocity fps	Pressure C.U.P.	Max.		
	Starting Grains			Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	7.0	1828	21,000	9.5	2184	36,400
700X	7.5	1937	29,400	9.0	2143	36,900
Green Dot	7.0	1828	21,000	10.0	2236	36,900
PB	8.0	1880	27,000	9.5	2088	36,400
SR-7625	8.5	1955	30,500	10.0	2157	38,600
SR-4756	8.5	1935	18,600	10.5	2207	35,500
SR-4759	14.5	2154	15,700	20.0	2833	33,600
IMR-4227	15.6	2156	13,800	20.1	2858	35,300
IMR-4198	16.8	2167	14,500	23.0	2883	30,200
748	22.9	2127	12,900	28.6	2811	25,800



#225646

55 gr., [#2 alloy] 2.350" OAL

POWDER	Sugg.	Velocity fps	Pressure C.U.P.	Max.		
	Starting Grains			Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	7.7	1797	22,100	10.4	2165	33,900
700X	8.0	1887	24,500	11.0	2286	40,200
Green Dot	8.2	1862	23,200	11.5	2292	39,700
PB	9.0	1892	27,300	11.0	2128	38,900
SR-7625	9.2	1905	26,700	11.7	2219	42,700
SR-4756	10.2	1986	26,700	12.6	2271	38,100
SR-4759	16.5	2218	22,000	18.5	2543	35,200
IMR-4227	16.5	2274	23,500	21.0	2754	36,200
IMR-4198	18.5	2172	18,400	24.6	2913	37,100
748	28.5	2380	19,000	34.0	3100	38,000

Note: Loads shown in shaded panels are maximum.

.22-250 REMINGTON - RCBS BULLETS

Gun: Remington Model 700

Barrel: 24"

Twist: 1-14

Cases: W-W

Primers: CCI 200, *250

22-055-FN



Wt. 57 GR.

Dia. .224"

Lube: Rifle

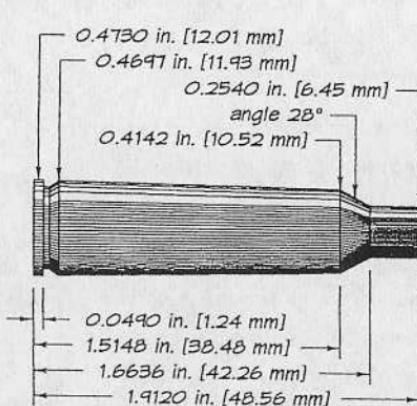
POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
760	*21.0	1938	Re7	13.0	1822
	*19.0	1757		11.0	1542
IMR 4895	19.0	2083	IMR 4198	13.0	1791
	17.0	1867		11.0	1521
2400	16.0	1517	PB	9.0	2016
	14.0	1315		8.0	1829
SR 4759	13.0	1973	Red Dot	8.5	1987
	11.0	1671		7.5	1723

*DENOTES USE OF CCI #250 MAGNUM PRIMER

22-250 REMINGTON

The ever-popular 22-250 Remington was the product of experiments with the 250-3000 Savage case necked down to hold .228 inch bullets. Jerry Gibby necked it to .224 inch and called it the 22 Varminter. Remington commercialized it in 1965.

For long-range varmint work, the 22-250 with 50 to 55 grain bullets is capable of making consistent hits out to 500 yards – if the shooter knows the range and can dope the wind. Virtually anyone who makes rifles makes a 22-250 varmint rig of some sort or another, be it heavy barrels, fluted barrels, synthetic stocks, laminated stocks or plain-vanilla walnut. The common denominator is that they all tend to shoot well enough to be called “varmint” rifles – or capable of holding five shots inside .5 inch at 100 yards with a variety of bullet weights and loads. In short, minute of angle accuracy – sub-one inch – is routine with the 22-250 Remington. VARGET is a fine powder in the 22-250 Remington, as are H380, H414 and H4895 with standard 55 grain bullets.



WINCHESTER
24"

Twist: 1:14"
Length: 1.902"

WINCHESTER LR

HODGDON

POWDER	STARTING LOADS			MAXIMUM LOADS		
	GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 40 GR. NOS BT			DIA. .224"		C.O.L. 2,350"	
H414	38.0	3644	39,600 CUP	41.0	3933	47,100 CUP
H380	38.0	3647	34,500 CUP	41.0	3855	39,200 CUP
VARGET	37.5	3936	43,400 CUP	39.5	4135	51,100 CUP
H4895	34.0	3750	43,800 CUP	37.0	4060	48,700 CUP
BULLET: 45 GR. BAR XBT			DIA. .224"		C.O.L. 2,340"	
H414	38.0	3537	40,200 CUP	41.0	3899	47,600 CUP
H380	38.0	3612	37,900 CUP	41.0	3839	43,500 CUP
VARGET	35.0	3652	46,000 CUP	38.0	3921	49,200 CUP
BL-C(2)	32.0	3612	42,600 CUP	35.0	3928	49,100 CUP
H335	31.5	3593	41,400 CUP	34.5	3908	48,500 CUP
H4895	34.0	3660	47,300 CUP	37.0	3918	49,100 CUP
H322	31.0	3490	44,600 CUP	32.5	3720	48,500 CUP
BULLET: 50 GR. SIE SP			DIA. .224"		C.O.L. 2,350"	
H4350	39.0	3410	43,600 CUP	42.0	3579	48,900 CUP
H414	37.0	3494	41,400 CUP	40.0	3765	48,600 CUP
H380	38.0	3562	41,700 CUP	41.0	3742	45,300 CUP
VARGET	34.5	3596	43,600 CUP	37.5	3834	50,400 CUP
BL-C(2)	31.5	3506	43,600 CUP	34.5	3740	48,400 CUP
H335	31.5	3519	44,400 CUP	34.5	3753	48,700 CUP
H4895	33.5	3530	43,800 CUP	36.5	3827	50,200 CUP
H322	30.0	3441	46,200 CUP	32.0	3628	50,300 CUP
BULLET: 52 GR. HDY A-MAX			DIA. .224"		C.O.L. 2,350"	
H4350	39.0	3402	43,800 CUP	41.0	3557	49,400 CUP
H414	37.0	3461	42,000 CUP	40.0	3692	48,900 CUP
H380	38.0	3509	41,900 CUP	41.0	3717	46,600 CUP
VARGET	34.0	3630	45,500 CUP	36.0	3784	50,000 CUP
BL-C(2)	31.0	3461	44,600 CUP	34.0	3702	49,700 CUP
H335	31.0	3417	43,200 CUP	33.5	3657	49,200 CUP
H4895	32.5	3467	44,400 CUP	35.5	3729	49,600 CUP
H322	29.0	3379	45,500 CUP	31.0	3498	48,000 CUP
BULLET: 55 GR. SPR SP			DIA. .224"		C.O.L. 2,350"	
H4350	37.0	3296	46,400 CUP	39.0	3490	47,800 CUP
H414	36.0	3324	40,200 CUP	39.0	3582	46,700 CUP
H380	38.0	3507	45,400 CUP	41.0	3713	50,700 CUP
VARGET	34.0	3490	46,100 CUP	36.5	3664	50,400 CUP
BL-C(2)	31.0	3410	43,800 CUP	34.0	3606	49,600 CUP
H335	30.5	3400	44,400 CUP	33.0	3589	51,100 CUP
H4895	32.5	3446	45,000 CUP	35.5	3670	49,300 CUP
H322	28.0	3339	46,200 CUP	30.0	3480	49,800 CUP

.22-250 REMINGTON - HODGDON POWDERS

HODGDON CONTINUED

POWDER	STARTING LOADS			MAXIMUM LOADS		
	GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 63 GR. SIE SP			DIA. .224"		C.O.L. 2,350"	
H4350	36.0	3210	45,400 CUP	38.0	3391	48,000 CUP
H414	35.0	3262	43,200 CUP	38.0	3432	47,100 CUP
H380	36.0	3266	46,600 CUP	38.5	3419	51,200 CUP
VARGET	29.5	3039	39,500 CUP	34.0	3426	50,400 CUP
H4895	31.5	3317	47,300 CUP	34.0	3486	50,400 CUP
BULLET: 70 GR. SPR SP			DIA. .224"		C.O.L. 2,330"	
H1000	36.0	3042	41,100 CUP	38.0	3187	47,500 CUP
H4831	35.0	2976	42,000 CUP	38.0	3189	50,300 CUP
H4350	34.0	3007	44,800 CUP	36.0	3129	49,600 CUP
H414	31.0	2860	42,000 CUP	34.0	3117	49,400 CUP
H380	33.0	3006	45,200 CUP	35.0	3161	51,500 CUP
VARGET	29.5	3006	44,700 CUP	32.0	3196	50,300 CUP
H4895	28.0	2933	43,000 CUP	31.5	3196	50,700 CUP

NEVER EXCEED MAXIMUM LOADS.

.22-250 REMINGTON

Bullet Diameter: .224
Barrel: 24"

HODGDON POWDER

STARTING LOADS					MAXIMUM LOADS			
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
45					H4895	20.0	2218	
GR. (GAS CHECK)					H4198	14.0	2188	
					H4227	11.0	1953	
50								
GR. (GAS CHECK)					H4198	14.0	2101	

NEVER EXCEED MAXIMUM LOADS.

SHOOTER'S LOG

Introduction

There has been a re-evaluation of the criteria for selecting data for inclusion. This means there will be some disagreement with previous data. The data in this guide takes precedence over **all** prior publications. *Previous editions of this loading guide should be discarded.*

For instance, we left out load combinations that were 'position sensitive'. This is what occurs when the load density is low. Velocity with the powder at the bullet is different from the velocity with the powder at the primer. More of these were noted with the ball propellants than with the extruded propellants.

In light of the growth of IPSC shooting, 38 Super Auto loads that make the 'major' classification (bullet weight x velocity = 175,000) are identified. While we have tested many combinations of components in 9mm Luger to attempt to meet 'major' requirements, we have not been able to find a load that makes the power floor for 'major' without exceeding SAAMI pressure recommendations. And while we were able to find loads for 38 Super Auto, they were not with lighter bullets. Turn to the data section for specific details.

In the charge tables, the 'START' charge listed for each load is our suggested beginning point with the components listed. There is the possibility that changing the named components could cause the maximum charge to be excessive, thus a reduction of the charge would be necessary. Some batches of military brass may require reducing the maximum charge by 8-12% to keep chamber pressure in line.

If you find signs of excessive pressure while using loads in this loading guide, STOP TESTING and verify all data and loading procedures. If they seem to be in order, check with our lab facility before proceeding.

Charge weights were obtained using industry standard pressure barrels. When time permitted, off-the-shelf weapons were used to obtain velocity figures. The guns used are noted.

In reloading, the prime concern should always be SAFETY. **Always** wear eye protection when reloading, even when working with the 'non-volatile' components. **Always** keep the reloading area clean. **Never** have more than one propellant within easy reach at any given time. Avoid having similar looking bullets of different weights on the bench at the same time. Read the safety notes before loading.

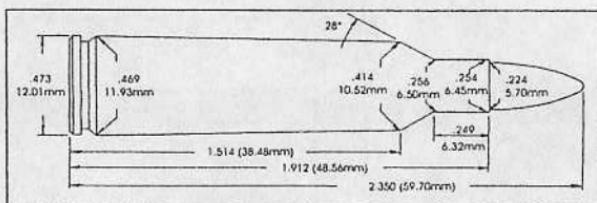
We have not found magnum primers to offer any particular advantage with our handgun powders. But, there are some rifle cartridges where they were used.

Handgun loads using the slower powders (No.7, No.9, and 1680) require heavy crimp and high bullet pull to insure consistency - particularly with cast bullet loads or in extremely cold weather. Be sure your dies are capable of this, otherwise the consistency of the load will be affected.

In the text, bullet weights for cast bullets - identified by (L) are actual weights, not the nominal weights.

.22-250 REMINGTON - ACCURATE POWDERS

Originally based on the .250-3000 Savage case, the .22-250 was one of America's most popular wildcat varmint and benchrest cartridges from the mid 1930s until its adoption by Remington in 1965 as a factory cartridge.



Presently rifles chambered for the .22-250 are available from almost every major rifle manufacturer. While not capable of the velocities produced by the .220 Swift, the .22-250 Remington is a well-balanced .22 varmint cartridge. The data for the Sierra 80 HPBT is for use only with rifles with a "fast twist" barrel.

The SAAMI Maximum Average Pressure for the .22-250 is 65,000 P.S.I.

.22-250 REMINGTON

Gun	APEX	Max Length	1.912"
Barrel Length	24"	Trim Length	1.892"
Primer	CCI 200	OAL Max	2.350"
Case	REM	OAL Min	2.315"

Bullet	START LOADS		MAXIMUM LOADS			P.S.I.	Cartridge Length	Comment
	Powder	Grains	Vol.	Powder	Grains	Vol.		
SRA 40 SP	2015BR	31.1	3494	2015BR	34.5	3971	57,600	2.260"
	2230	33.3	3560	2230	37.0	4045	60,000	
	2460	34.2	3600	2460	38.0	4091	61,600	
	2520	34.7	3555	2520	38.5	4040	58,500	
	2700		N/R	2700		N/R		
	4350	36.0	3081	4350	40.0	3501	38,900	Compressed
	3100	36.0	2688	3100	40.0	3055	28,400	Compressed
NOS 45 Hornet	2015BR	29.7	3354	2015BR	33.0	3811	58,500	2.305"
	2230	32.0	3410	2230	35.5	3875	59,700	
	2460	32.4	3392	2460	36.0	3854	58,800	
	2520	33.8	3412	2520	37.5	3877	58,800	
	2700	40.4	3660	2700	42.5	3894	60,400	
	4350	36.0	3103	4350	40.0	3526	45,500	Compressed
	3100	36.0	2732	3100	40.0	3104	33,900	Compressed

.22-250 REMINGTON - ACCURATE POWDERS

Bullet	START LOADS			MAXIMUM LOADS			P.S.I.	Cartridge Length	Comment
	Powder	Grains	Vel.	Powder	Grains	Vel.			
NOS 50 SP	2015BR	30.6	3335	2015BR	34.0	3790	60,700	2.350"	
	2230	32.4	3344	2230	36.0	3800	61,400		
	2460	32.9	3371	2460	36.5	3831	61,900		
	2520	33.3	3361	2520	37.0	3819	63,100		
	2700	39.0	3461	2700	41.0	3682	56,000		
	4350	36.0	3107	4350	40.0	3531	49,200		Compressed
HDY 53 HP	3100	36.0	2789	3100	40.0	3169	37,100		Compressed
	2015BR	30.2	3220	2015BR	33.5	3659	61,200	2.380"	*
	2230	30.6	3154	2230	34.0	3584	59,200		
	2460	31.5	3194	2460	35.0	3629	58,600		
	2520	32.0	3167	2520	35.5	3599	56,400		
	2700	39.0	3404	2700	41.0	3621	59,300		
NOS 55 SBT	4350	36.0	3084	4350	40.0	3505	51,600		Compressed
	3100	36.0	2739	3100	40.0	3112	37,900		Compressed
	2015BR	29.7	3166	2015BR	33.0	3598	59,600	2.370"	*
	2230	31.5	3176	2230	35.0	3609	59,700		
	2460	32.4	3230	2460	36.0	3670	62,300		
	2520	32.4	3172	2520	36.0	3605	59,700		
HDY 60 HP	2700	38.0	3436	2700	40.0	3655	60,700		
	4350	36.0	3050	4350	40.0	3466	51,500		Compressed
	3100	36.0	2699	3100	40.0	3067	37,400		Compressed
	2015BR	29.7	3077	2015BR	33.0	3497	61,500	2.400"	*
	2230	30.6	3014	2230	34.0	3425	57,600		
	2460	31.5	3079	2460	35.0	3499	60,100		
SRA 63 SP	2520	32.4	3091	2520	36.0	3512	62,300		
	2700	36.1	3269	2700	38.0	3478	61,100		
	4350	36.0	2988	4350	40.0	3395	53,200		Compressed
	3100	36.0	2623	3100	40.0	2981	37,500		Compressed
	2015BR	28.8	2959	2015BR	32.0	3363	60,700	2.325"	
	2230	29.7	2934	2230	33.0	3334	59,200		
SPR 70 SSP	2460	29.7	2912	2460	33.0	3309	57,400		
	2520	30.6	2932	2520	34.0	3332	58,300		
	2700	35.6	3199	2700	37.5	3408	60,900		
	4350	36.0	2997	4350	40.0	3406	58,200		Compressed
	3100	36.0	2648	3100	40.0	3009	39,700		Compressed
	2015BR	27.0	2751	2015BR	30.0	3126	58,900	2.325"	
SRA 80 HPBT	2230	27.9	2720	2230	31.0	3091	58,400		
	2460	27.9	2708	2460	31.0	3077	57,500		
	2520	29.3	2767	2520	32.5	3144	61,000		
	2700	32.8	2934	2700	34.5	3121	58,900		
	4350	34.2	2855	4350	38.0	3244	59,500		
	3100	34.2	2593	3100	38.0	2947	45,700		
	2700	32.3	2804	2700	34.0	2983	58,600	2.610"	*
	4350	33.3	2783	4350	37.0	3163	59,900		

* Over SAAMI Maximum OAL

.22-250 REMINGTON - ALLIANT POWDERS

ALLIANT

CASE: WINCHESTER	BARREL: 24"	PRIMER: WINCHESTER LR	
BULLET: 45 GR. SPR SP	DIA. .224"	C.O.L. 2,300"	
RELODER 12	35.5	3760	59,400 PSI
BULLET: 50 GR. HDY SP	DIA. .224"	C.O.L. 2,350"	
RELODER 12	34.3	3575	58,900 PSI
BULLET: 55 GR. HDY SP	DIA. .224"	C.O.L. 2,350"	
RELODER 15	35.3	3625	59,400 PSI
RELODER 12	33.3	3425	59,200 PSI
BULLET: 60 GR. HDY SP	DIA. .224"	C.O.L. 2,350"	
RELODER 19	41.0	3510	57,800 PSI
RELODER 15	34.7	3485	59,400 PSI
RELODER 12	32.5	3290	58,500 PSI

NEVER EXCEED MAXIMUM LOADS.

MINGTON

.22-250 REMINGTON - IMR POWDERS

IMR

CASE: REMINGTON	BARREL: 24"	PRIMER: REMINGTON 9 1/2
BULLET: 50 GR. SIE SP		DIA. .224"
		C.O.L. 2.350"
IMR 4320		37.0
IMR 4064		36.0
IMR 4895		36.0
IMR 3031		35.0
		3700
		3745
		3755
		3785
		53,000 CUP
		52,100 CUP
		52,700 CUP
		52,700 CUP

IMR CONTINUED

POWDER	STARTING LOADS			MAXIMUM LOADS		
	GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 55 GR. REM SP			DIA. .224"	C.O.L. 2.350"		
IMR 4320				36.0	3540	51,500 CUP
IMR 4064				35.5	3625	52,500 CUP
IMR 4895				35.5	3645	53,000 CUP
IMR 3031				34.0	3640	53,000 CUP

NEVER EXCEED MAXIMUM LOADS.**= NOTICE =**

The information presented is based upon results obtained in our ballistics laboratory. Safe loading practices should be observed at all times. Since IMR Powder Company has no control over the circumstances of loading, we assume no liability for the results obtained, and we guarantee only that our powder meets our manufacturing standards.

.22-250 REMINGTON - SCOT POWDERS

3032

<i>Powder Charge</i>	<i>Bullet Weight & Type</i>	<i>Muzzle Velocity</i>
30.0 grains	45 grain FMJ	3,330 fps
34.0 grains	45 grain FMJ	3,840 fps
29.0 grains	50 grain FMJ	3,180 fps
33.5 grains	50 grain FMJ	3,770 fps
28.0 grains	55 grain FMJ	3,115 fps
32.5 grains	55 grain FMJ	3,610 fps
28.0 grains	60 grain FMJ	3,085 fps
31.5 grains	60 grain FMJ	3,450 fps

4065

<i>Powder Charge</i>	<i>Bullet Weight & Type</i>	<i>Muzzle Velocity</i>
33.0 grains	45 grain FMJ	3,360 fps
37.0 grains	45 grain FMJ	3,880 fps
32.0 grains	50 grain FMJ	3,210 fps
36.0 grains	50 grain FMJ	3,800 fps
31.0 grains	55 grain FMJ	3,165 fps
35.0 grains	55 grain FMJ	3,650 fps
30.0 grains	60 grain FMJ	3,045 fps
34.0 grains	60 grain FMJ	3,545 fps

4351

<i>Powder Charge</i>	<i>Bullet Weight & Type</i>	<i>Muzzle Velocity</i>
35.0 grains	55 grain FMJ	3,170 fps
39.0 grains	55 grain FMJ	3,550 fps
35.0 grains	60 grain FMJ	3,035 fps
38.5 grains	60 grain FMJ	3,435 fps

.22-250 REMINGTON - WINCHESTER POWDERS

WINCHESTER

CASE: WINCHESTER	BARREL: 24"	PRIMER: WINCHESTER LR		
BULLET: 46 GR. WIN OPE		DIA. .224"	C.O.L. 2.350" MAX	
760		41.0	3850	49,000 CUP
748		36.8	3815	50,000 CUP
BULLET: 50 GR. WIN PSP		DIA. .224"	C.O.L. 2.350" MAX	
760		39.5	3700	49,200 CUP
748		35.0	3660	50,000 CUP
BULLET: 53 GR. WIN HP		DIA. .224"	C.O.L. 2.350" MAX	
760		38.6	3565	46,500 CUP
BULLET: 55 GR. WIN SP		DIA. .224"	C.O.L. 2.350" MAX	
760		39.0	3675	49,000 CUP
748		34.8	3500	49,500 CUP

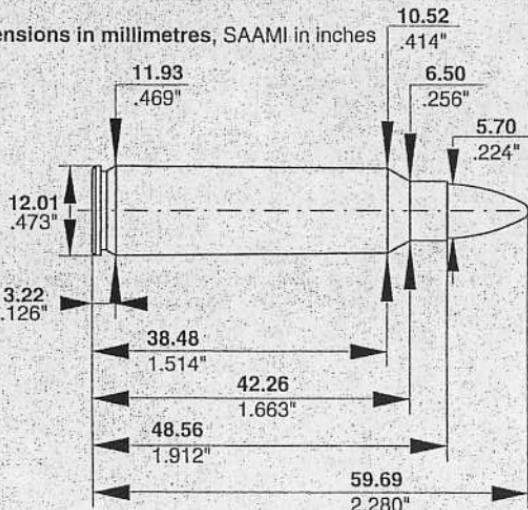
NEVER EXCEED MAXIMUM LOADS.

= WARNING =

Winchester makes no warranties express or implied, limited or full; specifically disclaim any and all warranties of fitness for a particular purpose and merchantability; and specifically disclaim any and all liability for consequential damages of any kind whatsoever. Failure to comply with these warnings or to use this data exactly as shown may result in accidents with serious injury and/or death to the shooter and/or bystanders.

.22-250 Remington

CIP max. dimensions in millimetres, SAAMI in inches



Country of origin:

USA

Year of introduction:

1965

Primer:

Large Rifle

Max. bullet diameter:

5.70 mm (.224")

Max. cartridge length:

59.69 mm (2.280")

Max. shell length:

48.56 mm (1.912"), trim to 48.40 mm (1.902")

Max. CIP pressure:

350 MPa (50800 psi)

Max. SAAMI pressure

53000 CUP/65000

The cartridge originally started as a wildcat in the 1920's. The original parent cartridge was Savage .250-3000 necked down to .22 calibre, which explains the name. Today .22-250 Rem. is so popular that nobody needs to form shells from other calibre brass any more. The components are available from several manufacturers.

This is an ex-benchrest and a current good varmint cartridge usable up to 250 meters. Some say even 300 m, but this combination takes a marksman behind the butt, an accurate rifle and a good scope on top.

.22-250 Remington is heralded by many, and the generous offering in both factory cartridges and rifle chamberings seems to augment the opinion. When one recognized writer says that this is "the best balanced and most flexible of the high powered .22 centerfires", one has to agree that the general public's opinion seems to have followed the writer's ideas.

.22-250 Rem. is a fine cartridge as long as it is kept in mind that we are shooting a .22 calibre lightweight bullet. The bullet is usually of fragile construction, the terminal energy fades away with the distance, and wind drift is certainly a factor to consider.

We recommend medium burning rate powders, from N130 to N140 for this calibre.

.22-250 Remington

TEST COMPONENTS:

Test barrel: 580 mm (22"), 1 in 14" twist, manufactured to meet CIP minimum dimensions.
Primers: Vihtavuori No. 68
Cases: Sako, trim-to length 48.30 mm (1.902")

Reloading Data, English Units:

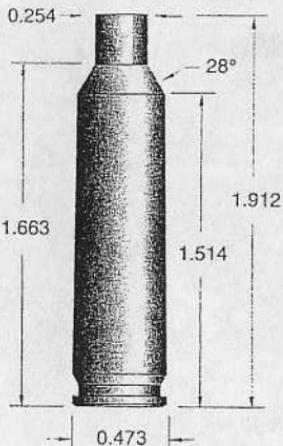
Weight [grs]	Type	Mfg.	O.A.L. [in.]	Bullet	Powder	Starting Load			Maximum Load		
				Type	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]	Pressure [psi]	
45	Spitzer	Speer	2.319	N130	31.3	3580	39200	34.5	3884	49300	
				N135	34.6	3564	36300	37.5	3885	49300	
				N140	36.6	3576	37700	40.1	3941	49300	
50	Spitzer	Speer		N130	27.6	3070	34100	31.6	3522	49300	
				N135	30.3	3161	34100	34.4	3579	49300	
				N140	32.1	3133	34100	37.2	3588	49300	
55	Spitzer	Speer	2.346	N135	31.0	3145	37700	34.4	3460	49300	
				N140	33.5	3185	37700	36.5	3483	49300	
				N150	34.4	3189	37700	38.1	3521	49300	
60	HP	Hornady	2.346	N140	31.7	2994	37700	35.3	3314	49300	
				N150	32.2	2977	37700	36.5	3318	49300	
69	HPBT	Sierra	2.346	N140	29.8	2775	37700	33.8	3079	49300	
				N150	30.6	2775	37700	35.0	3092	49300	
				N160	36.7	2843	37700	40.7	3157	49300	

INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

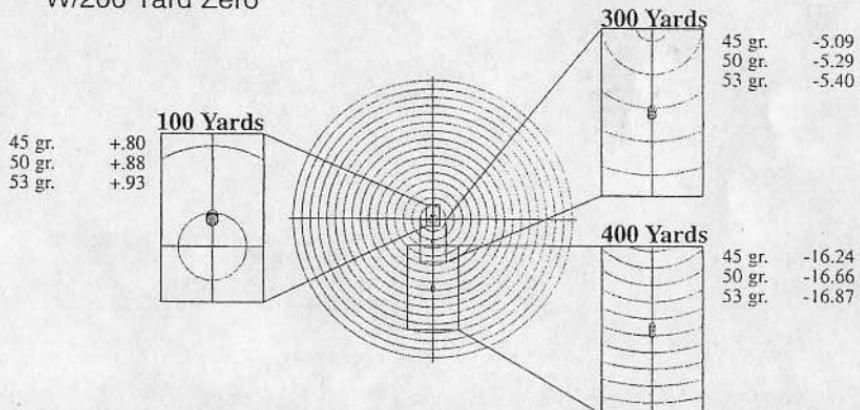
The .22-250 was a wildcat favorite for many years before it was adopted as a factory round by Remington in 1965. Basically it is a 250-3000 Savage case necked down to accept a .224" bullet (with some minor shoulder changes). It is the standard long range varmint cartridge, being almost as popular as the .223.

Case: Remington	Parent Case: 250-3000 Savage
Primer: CCI 200	Trim To: 1.902"
Barrel: 24"	Case Capacity: 44.62grs. (water)

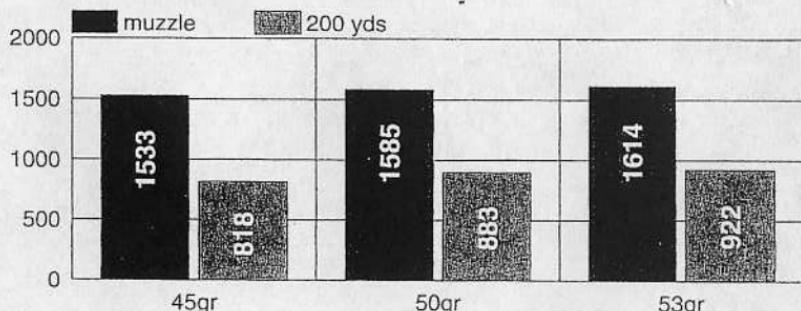


BULLET DROP COMPARISON

W/200 Yard Zero



BULLET ENERGIES



.22-250 REMINGTON - BARNES BULLETS

.22-250 Remington



45-grain XBT
S.D. .128 B.C. .203

Suggested Bullet Use

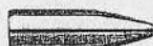


45-grain Solid
S.D. .128 B.C. .212

Suggested Bullet Use



Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
BLC 2	30.0	3437	34.0	3895
H335	31.0	3471	35.0	3919
H4895	33.0	3560	37.0	3992
VARG	35.0	3644	39.0	4061
H380	36.0	3474	40.0	3860
IMR3031	31.0	3416	35.0	3857
IMR4895	32.0	3489	36.0	3925
IMR4064	32.5	3519	36.5	3952
IMR4320	32.0	3439	36.0	3869
WIN748	32.5	3462	36.5	3888
WIN760	37.5	3490	41.5	3862
AA2230	31.5	3495	35.5	3939
RL12	32.0	3471	36.0	3905



50-grain XFB
S.D. .142 B.C. .220

Suggested Bullet Use



50-grain Solid
S.D. .142 B.C. .235

Suggested Bullet Use



Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
BLC 2	29.5	3256	33.5	3698
H335	31.0	3327	35.0	3756
H4895	32.5	3427	36.5	3849
VARG	33.0	3373	37.0	3782
H380	34.5	3400	38.5	3794
IMR3031	30.0	3325	34.0	3768
IMR4895	31.0	3429	35.0	3872
IMR4064	32.0	3390	36.0	3814
IMR4320	32.0	3334	36.0	3751
WIN748	31.5	3327	35.5	3749
WIN760	37.5	3361	41.5	3720
AA2230	31.0	3353	35.0	3786
RL12	30.0	3316	34.0	3758
RL15	32.0	3370	36.0	3791

INDICATES MAXIMUM LOAD — USE CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

.22-250 REMINGTON - BARNES BULLETS

.22-250 Remington



53-grain XFB
S.D. .151 B.C. .231

Suggested Bullet Use



Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
BLC 2	29.0	3162	33.0	3598
H335	29.5	3190	33.5	3623
H4895	32.0	3389	36.0	3813
VARG	31.5	3305	35.5	3725
H380	34.0	3323	38.0	3714
IMR3031	29.5	3259	33.5	3701
IMR4895	31.0	3385	35.0	3822
IMR4064	31.5	3334	35.5	3757
IMR4320	32.0	3281	36.0	3691
WIN748	30.5	3247	34.5	3673
WIN760	36.5	3331	40.5	3696
AA2230	30.5	3243	34.5	3668
RL12	30.0	3222	34.0	3652
RL15	31.0	3285	35.0	3709

■ ■ ■ ■ ■ INDICATES MAXIMUM LOAD — USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

SHOOTER'S LOG

POWDER BURNING RATE CHART

*Current Canister Grade Powders in order of approximate burning rate.
(R1 being the fastest, 748 the slowest)*

This list is approximate only and not to be used for developing loads.

1.	R-1, Norma	36.	No. 9, Accurate Arms
2.	N31, Vihtavuori	37.	R123, Norma
3.	TITEWAD, Accurate Arms	38.	N110, Vihtavuori
4.	RED DOT, Alliant	39.	H110, Hodgdon
5.	CLAYS, Hodgdon	40.	296, Winchester
6.	"HI-SKOR" 700-X, IMR Co.	41.	IMR4227, IMR Co.
7.	BULLSEYE, Alliant	42.	H4227, Hodgdon
8.	TITEGROUP, Hodgdon	43.	SR4759, IMR Co.
9.	American Select, Alliant	44.	1680, Accurate Arms
10.	SOLO 1000, Accurate Arms	45.	200, Norma
11.	GREEN DOT, Alliant	46.	Reloader 7, Alliant
12.	INTERNATIONAL, Hodgdon	47.	IMR4198, IMR Co.
13.	PB, IMR Co.	48.	H4198, Hodgdon
14.	N320, Vihtavuori	49.	N120, Vihtavuori
15.	WST, Winchester	50.	H322, Hodgdon
16.	No.2, Accurate Arms	51.	2015 BR, Accurate Arms
17.	SR 7625, IMR Co.	52.	N130, Vihtavuori
18.	HP-38, Hodgdon	53.	IMR3031, IMR Co.
19.	231, Winchester	54.	N133, Vihtavuori
20.	UNIQUE, Alliant	55.	H335, Hodgdon
21.	UNIVERSAL, Hodgdon	56.	N135, Vihtavuori
22.	Power Pistol, Alliant	57.	2230, Accurate Arms
23.	N330, Vihtavuori	58.	2460, Accurate Arms
24.	HERCO, Alliant	59.	H4895, Hodgdon
25.	WSF, Winchester	60.	IMR4895, IMR Co.
26.	N340, Vihtavuori	61.	RELODER-12, Alliant
27.	"HI-SKOR" 800-X, IMR Co.	62.	IMR-4320, IMR Co.
28.	SR4756, IMR Co.	63.	3100, Accurate Arms
29.	NO. 5, Accurate Arms.	64.	IMR 4064, IMR Co.
30.	HS-6, Hodgdon	65.	202, Norma
31.	3N37, Vihtavuori.	66.	2520, Accurate Arms
32.	N350, Vihtavuori	67.	RELODER-15, Alliant
33.	BLUE DOT, Alliant	68.	N140, Vihtavuori
34.	No. 7, Accurate Arms	69.	VARGET, Hodgdon
35.	2400, Alliant	70.	748, Winchester

This is a unique reloading/information manual. It contains currently available data regarding loading information for this individual cartridge. This data is compiled from the leading U.S. Bullet and gunpowder manufacturers.

This manual is not intended to replace the many comprehensive, in-depth reloading manuals available from a host of publishers, but instead provide you with a quick and easy-to-use reference source which will enable you to compare loads, types of powders, bullets and shot charges for components you may have on hand.

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